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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,295	09/16/2005	Toshikazu Tomioka	071971-0363	8087

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EXAMINER	
CHEN, CATHERYNE	
ART UNIT	**PAPER NUMBER**
1655	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/549,295	TOMIOKA, TOSHIKAZU	
	Examiner	Art Unit	
	CATHERYNE CHEN	1655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 August 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5,6,8-13 and 16-22* is/are pending in the application.

4a) Of the above claim(s) *6 and 8-11* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5,12,13 and 16-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 September 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *Sept. 16, 2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Currently, Claims 1, 5-6, 8-13, 16-22 are pending. Claims 1, 5, 12-13, 16-22 are examined on the merits.

Election/Restrictions

Applicant's election of a wintergreen family, genus ichiyakuso; polyvinyl alcohol; and water, in the reply filed on Aug. 22, 2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 6, 8-11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on Aug. 22, 2008.

Claim Objections

Claims 1, 19 are objected to because of the following informalities:

In Claim 1, there is an extra "and" in the sentence. In addition, please use English name for the wintergreen genus Ichiyakuso.

In Claim, 19, the word "ion" is misspelled.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Li et al. (Pharmacological actions of different species form genus Pyrola, 1997, J. Chinese Medicinal Materials, 20, 402-6).

Li et al. teaches pharmacological actions and toxicities of water extracts from Pyrola calliantha, Pyrola decorta and P. forrestiana (Abstract). Pyrola is a genus of Ichiyakuso (see Applicant's own Specification on page 4, line 14). Water is a paint solvent as indicated in Applicant's own Claim 22.

Claims 1 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka (JP 10120586 A, translation provided).

Tanaka teaches water solvent of Pyrola japonica (Abstract). Pyrola is a genus of Ichiyakuso (see Applicant's own Specification on page 4, line 14). Water is a paint solvent as indicated in Applicant's own Claim 22.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 12, 13, 16, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tvedten (WO 98/30236) and Tanaka (JP 10120586 A, translation provided).

Tvedten teaches methods for exterminating pests with protease enzyme, where a detergent may be used (Abstract). The pests may be insect and microbe (page 2, lines 29-30). Botanical extracts include wintergreen at about 5% by weight or less by dry weight of the composition (page 7, lines 1, 4-5). The enzymes may be dissolved or suspended in detergent, which are surfactants that are nonionic (page 3, lines 30-33). The detergent is about 85% or less by dry weight of the composition (page 5, lines 3-4).

Water is from about 60-99.5% by weight of the composition (page 7, lines 6-8). The enzymatic solution may be sprayed, injected, poured, foamed, splashed, splattered, sprinkled, dripped, drizzled, washed, mopped, wiped, spread, scattered, misted, fogged, bathed, soaked (page 8, lines 11-16). The act of disseminating the enzymatic solution inherently involved an industrial product impregnated or coated with the pest repellent paint because, in order to do the cited dissemination of the enzymatic solution, there requires containers, which will be coated with the solution. Thus, Claim 16 is taught. The method of eradication for ants, termites, roaches, lice, and other insects (page 10, lines 10-21). However, it does not teach the genus Ichiyakuso.

Tanaka teaches water solvent of Pyrola japonica (Abstract). Pyrola is a genus of Ichiyakuso, which is from wintergreen family (see Applicant's own Specification on page 4, line 14).

Tvedten teaches methods for exterminating pests with wintergreen extract at about 5% by weight or less by dry weight of the composition (page 7, lines 1, 4-5) and Tanaka teaches water solvent of Pyrola japonica (Abstract). Pyrola is a genus of Ichiyakuso, which is from wintergreen family (see Applicant's own Specification on page 4, line 14). Thus, an artisan of ordinary skill would reasonably expect that Pyrola could be used as the types wintergreen extract taught by the references. This reasonable expectation of success would motivate the artisan to use Pyrola in the reference composition. Thus, using Pyrola is considered an obvious modification of the references.

Claims 1, 5, 12, 13, 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tvedten (WO 98/30236) and Tanaka (JP 10120586 A, translation provided) as applied to claims 1, 12, 13, 16, 22 above, and further in view of Capelli (US 4933178).

Tvedten teaches methods for exterminating pests with protease enzyme, where a detergent may be used (Abstract). The pests may be insect and microbe (page 2, lines 29-30). Botanical extracts include wintergreen at about 5% by weight or less by dry weight of the composition (page 7, lines 1, 4-5). The enzymes may be dissolved or suspended in detergent, which are surfactants that are nonionic (page 3, lines 30-33). The detergent is about 85% or less by dry weight of the composition (page 5, lines 3-4). Water is from about 60-99.5% by weight of the composition (page 7, lines 6-8). The enzymatic solution may be sprayed, injected, poured, foamed, splashed, splattered, sprinkled, dripped, drizzled, washed, mopped, wiped, spread, scattered, misted, fogged, bathed, soaked (page 8, lines 11-16). The act of disseminating the enzymatic solution inherently involved an industrial product impregnated or coated with the pest repellent paint because, in order to do the cited dissemination of the enzymatic solution, there requires containers, which will be coated with the solution. Thus, Claim 16 is taught. The method of eradication for ants, termites, roaches, lice, and other insects (page 10, lines 10-21). However, it does not teach the genus Ichiyakuso, polyvinyl alcohol, silver ion, concentrations.

Tanaka teaches water solvent of Pyrola japonica (Abstract). Pyrola is a genus of Ichiyakuso, which is from wintergreen family (see Applicant's own Specification on page 4, line 14).

Tvedten teaches methods for exterminating pests with wintergreen extract at about 5% by weight or less by dry weight of the composition (page 7, lines 1, 4-5) and Tanaka teaches water solvent of Pyrola japonica (Abstract). Pyrola is a genus of Ichiyakuso, which is from wintergreen family (see Applicant's own Specification on page 4, line 14). Thus, an artisan of ordinary skill would reasonably expect that Pyrola could be used as the types wintergreen extract taught by the references. This reasonable expectation of success would motivate the artisan to use Pyrola in the reference composition. Thus, using Pyrola is considered an obvious modification of the references.

Capelli teaches metal-containing salts act as antimicrobial agents (column 1, lines 34-36). Silver ion is an example of a metal ion that possesses antimicrobial activity (column 1, lines 58-59). The solubility of the antimicrobial agent in a suitable solvent must be sufficient so that the resulting coating has a concentration of agent which will yield antimicrobial activity (column 2, lines 49-52). Antimicrobial coating is a polymer of polyvinyl alcohol (column 6, lines 12-13, 22-24). The coating can be applied to a medical device by dipping in the antimicrobial solution and allowed the solvent to evaporate (column 6, lines 48-50). The dried silver ion was dissolved in sufficient solvent to form a 20% solution (weight/volume) (column 8, lines 19-23).

Tvedten teaches methods for exterminating pests with protease enzyme, where a detergent may be used (Abstract), where the pests may be insect and microbe (page 2, lines 29-30). Capelli teaches metal-containing salts act as antimicrobial agents (column 1, lines 34-36), where silver ion is an example of a metal ion that possesses antimicrobial activity (column 1, lines 58-59), and antimicrobial coating is a polymer of polyvinyl alcohol (column 6, lines 12-13, 22-24). Thus, an artisan of ordinary skill would reasonably expect that methods of using silver ion could be used as the types of method of exterminating microbes taught by the references. This reasonable expectation of success would motivate the artisan to use silver ion in a polyvinyl alcohol solvent in the reference composition. Thus, using silver ion in a polyvinyl alcohol is considered an obvious modification of the references.

The references do not specifically teach adding the ingredients in the amounts claimed by applicant for treating microbials. Tvedten teaches methods for exterminating pests with wintergreen extract at about 5% by weight or less by dry weight of the composition (page 7, lines 1, 4-5) and water is from about 60-99.5% by weight of the composition (page 7, lines 6-8). The dried silver ion was dissolved in sufficient solvent to form a 20% solution (weight/volume) (Capelli, column 8, lines 19-23). Parts by weight can also be expressed as a percentage. Therefore, the percentages can also be expressed as parts by weight, assuming one gram of water is equal to one mL of water. The amount of a specific ingredient in a composition that is used for a particular purpose (the composition itself or that particular ingredient) is clearly a result effective parameter that a person of ordinary skill in the art would routinely optimize. "[W]here

the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). Thus, optimization of general conditions is a routine practice that would be obvious for a person of ordinary skill in the art to employ. It would have been customary for an artisan of ordinary skill to determine the optimal amount of each ingredient to add in order to best achieve the desired results. Thus, absent some demonstration of unexpected results from the claimed parameters, this optimization of ingredient amount would have been obvious at the time of applicant's invention.

Conclusion

No claim is allowed.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catheryne Chen whose telephone number is 571-272-9947. The examiner can normally be reached on Monday to Friday, 9-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry McKelvey can be reached on 571-272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Catheryne Chen
Examiner Art Unit 1655

/Michael V. Meller/

Primary Examiner, Art Unit 1655